

O'nyong-nyong Virus, UgMP 30

Catalog No. NR-51661

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Togaviridae*, *Alphavirus*

Species: O'nyong-nyong virus

Strain/Isolate: UgMP 30

Original Source: O'nyong-nyong virus (ONNV), UgMP 30 was isolated from human serum in 1959 in the Northern Province of Uganda and submitted to Division of Vector-Borne Diseases (DVBD) through Yale Arbovirus Research Unit in 1976.¹

ONNV is a single-stranded RNA virus belonging to the group of mosquito-borne viruses including Chikungunya virus, Mayaro virus, River Ross virus and Sindbis virus known to cause arthritis in humans.² ONNV was first isolated during a major epidemic in Uganda in 1959, which later spread to countries in south-eastern Africa. ONNV is transmitted by anopheline mosquitoes with humans as amplification host during epidemics.^{3,4} Clinical manifestations of infection with ONNV include an acute febrile episode with skin rash, lymphadenopathy, joint pains followed by polyarthralgia and myalgia that can be severe and long lasting.^{3,5}

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with ONNV, UgMP 30.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-51661 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Host: *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC® CCL-1586™)

Growth Medium: Dulbecco's Modified Eagle's Medium modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate, and 1.5 g/L sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 90% to 95% confluent

Incubation: 2 to 4 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: O'nyong-nyong Virus, UgMP 30, NR-51661."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Russell, B. J., Personal Communication.
2. Lwande, O. W., et al. "Global Emergence of Alphaviruses that Cause Arthritis in Humans." Infect. Ecol. Epidemiol. 18 (2015): doi.10.3402. PubMed: 26689654.

3. Nyaruaba, R., et al. "Arboviruses in the East African Community Partner States: A Review of Medically Important Mosquito-Borne Arboviruses." Pathog. Glob. Health 113 (2019): 209-228. PubMed: 31664886.
4. Pezzi, L., et al. "GloPID-R Report on Chikungunya, O'nyong-nyong and Mayaro Virus, Part I: Biological Diagnostics." Antiviral Res. 166 (2019): 66-81. PubMed: 30905821.
5. Gall, B., et al. "Emerging Alphaviruses are Sensitive to Cellular States Induced by a Novel Small-Molecule Agonist of the STING Pathway." J. Virol. 92 (2018): e01913-17. PubMed: 29263267.

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